WHAT IS CLAIMED IS:

1. A method for preprocessing audio data to be processed by a codec having variable coding rate, comprising the steps of:

classifying the audio data based on the characteristic of the audio data; and

preprocessing frames of audio data selected based on the classification.

2. A method for preprocessing audio data to be processed by a codec having variable coding rate, comprising the steps of:

classifying the audio data based on the characteristic of the audio data;

in case the audio data includes monophonic sound, performing AGC (automatic gain control) preprocessing of all frames; and

in case the audio data includes polyphonic sound, performing AGC preprocessing of selected frames.

3. A method in accordance with claim 2, wherein the step of performing AGC preprocessing of selected frames include deciding whether a frame in the audio data includes noise signal or not.

4. A method for preprocessing audio data to be processed by a codec having variable coding rate, comprising the steps of:

deciding an interval of audio data that is to be encoded in a low bit rate in said codec; and

adjusting the amplitude of audio data of the decided interval, such that the audio data in the interval may not be encoded in said low bit.

5. A method in accordance with claim 4, wherein the adjusting step comprises the steps of:

calculating signal levels of the audio data;

deciding smoothed gain coefficients based on signal levels; and

generating preprocessed audio data by multiplying the smoothed gain coefficients to the audio data in the decided interval.

6. An apparatus for providing audio data encoded by a codec having variable encoding rate, comprising:

means for deciding an interval of audio data that is to be encoded in a low bit rate by said codec; and

means for adjusting the amplitude of audio data of the decided interval, such that the audio data in the interval may not be encoded in said low bit.